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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,239

04/29/2005

Yuko Nishiyama

Q87756

7054

65565 7590 10/31/2007
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EXAMINER

FERGUSON, LAWRENCE D

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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10/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/533,239	Applicant(s) NISHIYAMA ET AL.	
	Examiner Lawrence D. Ferguson	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/24/07;4/29/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections – 35 USC § 102(b)

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, 6-15, 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bohm (U.S. 4,346,782).

Bohm discloses a cured damping structure comprising a substrate coated with a softer acrylic resin layer and harder PVC layer (abstract, column 1, lines 10-14, column 2, lines 12-31 and column 3, lines 52-55) as in claim 1, where epoxides are also usable material for the coating layer(s) (column 2, lines 59-68). Bohm teaches it is known to spray the coating layers (column 2, lines 1-9), which would render the coated layers fluid resin compositions. Figure 1 shows that no part of the hardest layer in the cured product layers is directly formed on the substrate, as in claim 6. The substrate of Bohm is a thin metal sheet (column 1, lines 10-12) as in claim 16. Bohm discloses the acrylic resin layer comprises methacrylate and the second layer comprises a filler (column 4, lines 15-27) as in claims 28-29. Because Bohm lacks tin, low molecular weight siloxane, anionic constituents and outgas, the limitations of claims 19-22 are met as specifically in claims 21-22, 100 ppm or less is interpreted as having a value of zero. Because the

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coatings of Bohm are used on motor vehicle underbodies, it is inherent for the layers to be formed on concave substrate, as underbodies for vehicles have varying shapes, including concave shapes. Because Bohm discloses a cured laminated structure comprising a substrate with at least two of the cured layers having a different hardness, where the outer layer is harder than the intermediate layer, the hardness, specific gravity and glass transition temperature of the layers are inherent. The claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. In re Best, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Mere recitation of newly-discovered function or property, inherently possessed by things in prior art, does not cause claim drawn to those things to distinguish over prior art. In claims 14 and 15, the phrases, "formed by applying and curing the fluid resin compositions" and "formed by applying and curing the respective fluid resin composition" introduces a process limitation to the product claim. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966. Further, process limitations are given no patentable weight in product claims. In claim 17, the phrase, "for an apparatus generating vibration and sound" is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the

intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In claim 18, the phrase, "curability selected from the group consisting of ... mixing curability" constitutes a 'capable of' limitation and that such a recitation that an element is 'capable of' performing a function is not a positive limitation but only requires the ability to so perform.

Claim Rejections – 35 USC § 103(a)

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3, 5, 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *et al. Bohm* (U.S. 4,346,782).

Bohm is relied upon for claim 1 as above. Bohm does not explicitly teach the thickness of the layers as in instant claims 3, 5). Although Bohm does not disclose the thicknesses as claimed, thickness is an optimizable feature. It would have been obvious to one of ordinary skill in the art to optimize the coated layers of Bohm because discovering the optimum or workable range involves only routine skill in the art. The

thickness directly affects durability and of the laminated material. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 USPQ 215.

Claim Rejections – 35 USC § 103(a)

5. Claims 23-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over et al. Bohm (U.S. 4,346,782) in view of Sophiea et al (U.S. 6,277,903).

Bohm is relied upon for claim 1 as above. Although Bohm discloses epoxides are usable material for the cured coating layer(s) (column 2, lines 59-68) the reference does not specifically teach the outer coating layer comprises epoxy resin. Sophiea teaches cured sprayable epoxy coatings which have sound damping properties which can be applied to substrates such as vehicles, which can be used instead of polyvinyl chloride based coatings and can easily be placed or coated on odd shaped (concave) objects (column 1, line 9 through column 2, line 26). Bohm and Sophiea are combinable because they are related to a similar technical field, which is cured sprayable coatings for vehicles. Therefore, it would have been obvious to one of ordinary skill in the art to replace the pvc coating of Bohm with an epoxy coating of Sophiea as Sophiea teaches it is known to replace conventional pvc coatings with epoxy coatings, which have improved sound damping properties and are more flexible in coating odd shapes objects (column 1, lines 10-12 and 34-47). In claim 27, the phrase, "photo-curable" constitutes a 'capable of' limitation and that such a recitation that an element is 'capable of' performing a function is not a positive limitation but only

requires the ability to so perform. Because the combined references teach a first cured layer of acrylic resin and a second cured epoxy resin, the hardness, specific gravity and glass transition temperature of the layers are expected, absent any evidence to the contrary, as in claims 33, 35, 36 and 41. Although the combined references do not disclose the thicknesses as claimed, thickness is an optimizable feature. It would have been obvious to one of ordinary skill in the art to optimize the coated layers of Bohm because discovering the optimum or workable range involves only routine skill in the art. The thickness directly affects durability and of the laminated material. *In re Aller* 105 USPQ 233 and see *In re Boesch*, 617 USPQ 215. Because Bohm lacks tin, low molecular weight siloxane and outgas, the limitations of claims 42-44 are met as specifically in claims 44, 100 ppm or less is interpreted as having a value of zero. In claim 45, the phrase, "for a HDD" is an intended use. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).



BRUCE H. HESS
PRIMARY EXAMINER
GROUP 1300

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence Ferguson whose telephone number is 571-272-1522. The examiner can normally be reached on Monday through Friday 9:00 AM – 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on (571) 272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


L. Ferguson
Patent Examiner
AU 1794